



UWA SHRIMP DATA LOG

Date: 26/1/00 UWA Mount No.: 99-81 Whose sample?: April Operator(s): MCV + AP

Indicate any change to the following: 196 204 bkg 206 207 208 238 248 254 270  
 Precambrian Count time (secs): 2 10 10 10/20\* 30/10\* 10 5 5 2  
 Phanerozoic\* Delay time (secs): 8 3 1 2 1 1 3 2 2

Steel: Wein volts / nA = 58V/18.0 for O<sup>-</sup>; = 34V/3.3 for O<sub>2</sub><sup>-</sup>; = 26V/7.5 for NO<sup>-</sup>  
 dead-time = 32 nanosecs expected resolution = >4200 actual resolution = 5325  
 aperture = ? microns retardation lens = 0 volts

Expected offsets (amu): 196-204 = 8.170; 204-bkg = 0.045; 204-206 ~ 2.000; 206-207 = 1.000; 206-208 = 2.000  
 Actual: 196-204 = 8.170 204-bkg = 0.045 204-206 = 2.002  
 206-207 = 1.000 206-208 = 1.999  
 Primary-epoxy = 2.8 nA Primary-CZ3 = 4.1 nA PESABM-CZ3 = 63 pA  
 Raster time (mins): 1 Raster aperture (microns): 120 No. of scans: 7

Comments: A = AQC 834 (J1) near base of Joffie. aperture size ~ 30 μm.  
 NB: charging shown by ↓ UO/U ratios.

**KD1 files** - n = 11 σ (slope 2) = 1.60% (exc sl 4-4 & 7-1) NB should exclude sl 4-5? bec UO/U ↓!  
 (Actual 2.13) = 1.35%

**KD2 files** n = 10 σ (slope 2) = 1.40% (exc sl 4-4, 4-5 & 7-1) < σ (Actual 2.06) = 1.37%  
 NB: possibility that Au coat is uneven... 1° changes but stable. NB: Au-coat scratch!!

Rejection over-ride Sample/Std ID Time - printout UO/U 196 Kcps 206 cps U ppm 204Pb ppb f206 % Age ± 1σ (Ma) 206/238 207/206 Offsets OK?

A

Rejection over-ride	Sample/Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ± 1σ (Ma)	206/238	207/206	Offsets OK?
	sl. 4-1	11:04	7.73	15.0	1198	220	1.1	.10	572 ± 1	504 ± 38		✓
	sl. 4-2	11:26	7.27	15.4	1098	228	1.9	.09	581 ± 1	539 ± 20		✓
alot of failure (6)	A. 1-2	11:49	7.38	15.3	6280	255	3.5	.04	2459 ± 5	2414 ± 5		✓ 2442 ± 5 96%
" (6)	A. 2-1	12:10	7.27	16.8	2958	123	17.1	.46	2306 ± 6	2395 ± 8		✓ 2395 ± 9 94%
diff A scans 3 del A scans 1, 2 + 3	DREADEFUL A. 3-1	12:34	7.02	7.1	2594	247	5.7	.07	2578 ± 7	2472 ± 6		✓ 2416 ± 13 105%
Del 1st ThO	sl. 4-3	12:56	7.28	14.9	1095	231	1.1	.06	589 ± 1	517 ± 20		✓
alot fail (-)	A. 4-1	13:17	7.78	14.0	4911	189	8.6	.14	2460 ± 5	2436 ± 5		✓ 2436 ± 6 91%
	A. 5-1	13:38	7.44	14.7	5605	237	3.5	.05	2411 ± 5	2438 ± 5		✓ 2432 ± 5 95%

n<sub>A</sub> = 5  
 χ<sup>2</sup> = 4.57  
 Age = 2431.68 ± 8.46

n<sub>A</sub> = 3 (exc. 1-1 & 2-1 outliers)  
 γ<sup>2</sup> = 0.65  
 Age = 2432.22 ± 8.29

**A**

Rejection over-ride	Sample/Std ID	Time - printout	UO/U Kcps	196 cps	206 cps	U ppm	204Pb ppb	f206 %	Age ± 1σ (Ma) 206/238	207/206	Offsets OK?
	A.6-1		<i>computer glitch</i>								
4.2nA del scan 1 ThO	SI 4-4	15:17	7.35	14.0	1062	-	-	-	519 ± 19		gen lower counts
	SI 4-5	15:38	6.11	13.6	781	220	0.8	.09	572 ± 1	455 ± 47	new calibr <sup>2</sup> std
	A.7-1	15:59	7.57	15.3	5182	138	0.9	.02	2451 ± 5	2454 ± 5	✓ 2451 ± 5 98%
lost 1	A.8-1	16:19	7.10	16.0	3889	125	11.3	.29	2350 ± 5	2440 ± 7	✓ 2440 ± 7 94%
4.0nA	A.9-1	16:41	8.22	14.0	6424	162	3.6	.07	2315 ± 4	2443 ± 4	✓ 2437 ± 4 93%
4.1nA	SI 4-6	17:02	7.53	14.5	1095	155	0.4	.08	576 ± 1	534 ± 20	✓
4.0nA	A.10-1	17:23	6.82	16.5	3219	110	1.5	.04	2404 ± 6	2449 ± 6	✓ 2449 ± 6 90% ↑ 204 & 604
3.9nA	A.11-1	17:45	7.69	13.4	5340	158	1.4	.03	2422 ± 5	2442 ± 5	✓ 6.4 20005 2442 ± 5 97%
4nA	A.12-1	18:08	7.08	12.8	4310	163	2.3	.04	2434 ± 5	2458 ± 5	✓ 2452 ± 5 100%
3.9nA	A.13-1	18:29	7.95	11.3	4041	125	2.5	.06	2510 ± 6	2442 ± 6	✓ 2442 ± 6 100%
3.8nA	A.14-1	18:50	7.73	11.4	3122	107	2.4	.07	2420 ± 6	2401 ± 6	✓ 2431 ± 7 99%
lost 1	SI 4-7	19:10	7.64	13.4	1047	151	1.4	.17	586 ± 1	478 ± 21	✓
3.8nA	A.15-1	19:35	7.49	12.6	4222	136	2.9	.06	2521 ± 6	2440 ± 5	✓ 2439 ± 6 99%
4.1nA	A.16-1	19:56	6.40	16.4	2906	124	1.4	.04	2352 ± 6	2453 ± 7	✓ 2458 ± 7 94%
4.0nA	A.17-1	20:17	7.44	14.9	6585	195	6.2	.02	2391 ± 4	2411 ± 5	✓ 2405 ± 5 96%
3.7nA	A.18-1	20:38	8.68	11.2	5686	143	2.3	.05	2478 ± 5	2451 ± 5	small grain ✓ 2451 ± 5 98%
3.9nA	A.19-1	20:59	7.68	13.6	5678	163	1.1	.02	2477 ± 5	2447 ± 5	✓ 2447 ± 5 99%
4.1nA	SI 2-1	21:21	6.55	15.0	897	186	2.3	.23	568 ± 1	475 ± 45	✓
lost 1	A.20-1	21:43	7.73	13.5	5762	166	0.7	.01	2429 ± 5	2448 ± 4	✓ 2448 ± 4 96%
4.2nA	A.21-1	22:04	7.87	14.2	4648	119	1.3	.03	2478 ± 6	2432 ± 5	✓ 2432 ± 5 99%
4.0nA	A.22-1	22:25	6.59	17.3	3135	109	1.2	.03	2476 ± 6	2447 ± 6	✓ 2443 ± 7 99%
4.0nA	A.23-1	22:46	7.52	14.4	5838	170	3.5	.06	2436 ± 5	2445 ± 5	✓ 2441 ± 5 98%
4.1nA	A.24-1	23:07	7.49	15.2	5506	154	1.7	.03	2427 ± 5	2455 ± 5	✓ 2440 ± 5 99%
del 1 <sup>st</sup> scan ThO	SI 3-1	23:29	7.53	14.8	1104	153	1.1	.03	574 ± 1	556 ± 20	✓

1. jumped 1/2 way & then dropped  
3.9nA → 4.2 → 3.9

lost 1

lost 1

lost 1

$N_A = 19$   
 $Age = 2440.82 \pm 5.26$   
 $\chi^2 = 3.78$

$N_A = 18$  (ex 2-1)  
 $Age = 2441.82 \pm 4.28$   
 $\chi^2 = 2.41$

$N_A = 17$  (ex 17-1)  
 $Age = 2443.12 \pm 3.84$   
 $\chi^2 = 1.80$

2-1 youngest outlier no overlap slightly discordant

lost 4nA

Rejection over-ride    Sample/ Std ID    Time - printout    UO/U    196 Kcps    206 cps    U ppm    204Pb ppb    f206 %    Age ±1σ (Ma) 206/238    207/206    Offsets OK?

**A**  
 nl 4.0  
 " "  
 3.9na  
 " "  
 4.1na  
 4.0na  
**C**  
 " "  
 " "  
 " "  
 " "  
 3.9  
 4.1na  
**A** 4.0na  
 " "  
 4.1na  
 3.8na  
 " "  
**A** del scan 206  
 " "  
 4.2na  
 4.0  
 " "  
 " "  
 " "  
 3.8na

Rejection over-ride	Sample/ Std ID	Time - printout	UO/U	196 Kcps	206 cps	U ppm	204Pb ppb	f206 %	Age ±1σ (Ma) 206/238	207/206	Offsets OK?
	A 25-1	23:49	7.80	14.4	6243	168	6.1	.12	2384 ± 4	2432 ± 5	✓ 2437 ± 6 96%
	A 26-1	24:11	8.05	11.7	5185	143	2.4	.05	2606 ± 6	2453 ± 5	✓ 2446 ± 5 103%
	A 27-1	24:31	7.82	8.3	3629	160	11.3	.21	2498 ± 6	2441 ± 6	✓ 2441 ± 7 96%
	A 28-1	24:53	7.85	15.0	6135	149	2.1	.04	2484 ± 5	2438 ± 4	✓ 2448 ± 4 99%
	A 29-1	1:15	8.07	13.8	7185	184	6.2	.11	2393 ± 4	2422 ± 4	✓ 2421 ± 4 96%
	A 30-1	1:37	7.29	15.3	6044	180	2.3	.04	2447 ± 4	2452 ± 4	✓ 2452 ± 4 98%
	SL 8-1	2:01	7.51	14.2	1088	156	1.8	.03	585 ± 1	526 ± 20	✓
	C 1-1	2:24	7.01	17.5	8121	441	16.1	.22	1417 ± 2	2016 ± 5	✓
	C 2-1	2:46	7.34	15.9	3745	105	2.0	.06	2436 ± 6	2428 ± 6	✓
	C 3-1	3:12	7.18	13.5	918	31	0.9	.08	2541 ± 12	2448 ± 12	✓
	C 4-1	3:32	7.60	14.7	4289	120	1.7	.05	2420 ± 5	2448 ± 5	✓
	C 5-1	3:53	6.87	15.4	2669	91	1.7	.06	2479 ± 7	2441 ± 7	✓
	C 6-1	4:25	7.04	12.8	605	23	1.3	.17	2514 ± 15	2451 ± 17	✓
	SL 8-2	4:45	7.22	14.1	994	163	-0.4	.06	573 ± 1	518 ± 21	✓
	A 31-1	5:07	7.40	14.9	7702	330	12.5	.18	1763 ± 2	2162 ± 5	✓ 2162 ± 5
	A 32-1	5:28	7.69	14.5	5135	135	3.3	.07	2507 ± 5	2449 ± 5	✓ 2448 ± 5
	A 33-1	5:52	6.02	8.2	2134	242	0.7	.01	2186 ± 6	2383 ± 7	✓ 2383 ± 7
	A 34-1	6:13	9.02	13.1	8775	194	5.4	.01	2235 ± 4	2372 ± 4	✓ 2372 ± 4
	A 35-1	6:37	7.76	13.5	5157	149	2.7	.06	2398 ± 5	2446 ± 5	✓ 2446 ± 5
	SL 37-1	6:58	6.22	11.5	641	219	1.6	.15	530 ± 1	658 ± 25	✓
	A 36-1	7:20	6.50	17.9	3194	113	2.1	.06	2457 ± 6	2444 ± 6	✓ 2444 ± 6 NB away from scratches
	A 37-1	7:44	7.14	15.3	4409	138	1.6	.04	2458 ± 5	2438 ± 5	✓ 2442 ± 5
	A 38-1	8:05	7.10	15.5	4002	125	0.6	.02	2457 ± 5	2456 ± 5	✓ 2440 ± 5
	A 39-1	8:25	7.68	14.4	4050	111	5.8	.16	2443 ± 6	2425 ± 6	✓ 2425 ± 6
	A 40-1	8:46	7.67	13.9	3587	103	3.1	.09	2434 ± 6	2456 ± 6	✓ 2450 ± 6
	SL 7-2	9:07	7.06	14.9	939	158	0.9	.09	567 ± 1	509 ± 22	✓
	A 41-1	9:29	8.17	12.7	4755	129	1.2	.03	2382 ± 5	2413 ± 5	✓ 2418 ± 5
	C 7-1	9:50	7.10	14.4	1054	34	0.9	.11	2573 ± 11	2453 ± 12	✓